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EXAMINER

YOON, TAE H

ART UNIT

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1714

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 891916,671	Applicant(s) Tung et al
Examiner T. Yoon	Group Art Unit 1714

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **THREE** MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

Responsive to communication(s) filed on _____

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

Claim(s) 1-44 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-44 is/are rejected.

Claim(s) _____ is/are objected to.

Claim(s) _____ are subject to restriction or election requirement

Application Papers

The proposed drawing correction, filed on _____ is approved disapproved.

The drawing(s) filed on _____ is/are objected to by the Examiner

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

All Some* None of the:

Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No. _____.

Copies of the certified copies of the priority documents have been received
in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). 4 Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948 Other _____

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Claim No. 39 is missing, and thus claims 40-45 have been renumbered as 39-44 under Rule 126.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The disclosure and claims recite that the iron particles have the apparent density of about 2.44 g/cc. It is well known that the element iron has the apparent density of about 7.86 g/cc. Thus, applicant failed to describe adequately the nature of said iron particles and how to obtain such iron particles in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 10, 11, 34, 36, 37, 39 and 42-44 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Edwards et al (US 2002/077405 A1).

Edwards et al teach polyester bottle resins that includes 20-200 ppm of talc or calcium carbonate, and bottles having low-haze and high-clarity thereof in abstract. Said talc and calcium carbonate has an average particle size of less than about ten microns ([0020]) and meets the instant oxygen-scavenging particles. Surface treatment of filler is taught at [0055]. It is known in the art that powders of calcium carbonate has a density of about 3 g/cc. Thus, the teaching of

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Edwards et al meets the instant concentration requirement, and said polyester bottle resins inherently possess the instant Hunter haze value.

Thus, the instant invention lacks novelty.

Claims 1-4, 6, 10, 11, 34, 36, 37, 39 and 42-44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nichols (US 5,008,230).

Nichols teaches a high-clarity, colorless PET having various elemental metal catalyste in abstract and examples. Said elemental metal catalysts are inherently present in the polyester of Nichols since Nichols does not teach the removal of said catalysts. Thus, the teaching of Nichols meets the instant concentration requirement, and said polyester bottle resins inherently possess the instant Hunter haze value. Said elemental metals have a particle size of less than about 25 microns since it is used as cobalt acetate (salt) for example, and meets the instant oxygen-scavenging particles. The teaching of Nichols still meets the invention when said elemental metals have a particle size of more than about 25 microns since there is no limitation regarding the amount of particles having a size of more than about 25 microns and since the amount of particles having a particle size of less than about 25 microns can be zero. Note that Sb has a density of about 6.7 g/cc and Co has a density of about 8.9 g/cc. Mn has a density of about 7.2 g/cc.

Thus, the instant invention lacks novelty.

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Claims 1-6, 12-15, 17, 20-22, 24, 34, 36-39 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Konagaya et al (US 5,434,000).

Konagaya et al teach polyester resins containing 10-500 ppm of various elemental metals in table 2. Said elemental metals have a particle size of less than about 25 microns since it is used as cobalt acetate (salt) for example, and meets the instant oxygen-scavenging particles. The teaching of Konagaya et al still meets the invention when said elemental metals have a particle size of more than about 25 microns since there is no limitation regarding the amount of particles having a size of more than about 25 microns and since the amount of particles having a particle size of less than about 25 microns can be zero. Note that Sb has a density of about 6.7 g/cc and Co a density of about 8.9 g/cc. Said elemental metals which are catalysts inherently present in the polyester of Konagaya et al since Konagaya et al does not teach the removal of said catalysts.

Thus, the instant invention lacks novelty.

Claims 1-4, 6, 34, 36, 37, 39 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kuze et al (US 4,595,715).

Kuze et al teach polyester resins containing 180 ppm of calcium carbonate having a particle size of 0.5 micron in example 2, table 1.

Thus, the instant invention lacks novelty.

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Claims 1-6, 11-15, 17, 19-22, 24, 26-34, 36-39, 43 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Maxwell et al (US 6,022,920).

Maxwell et al teaches polyester resins containing 5-50 ppm of iron oxide having a size of 0.1 to 10 microns at col. 3, lines 17-28, col. 4, lines 36-44 and in examples. Said polyester resins inherently yield the instant Hunter haze value.

Thus, the instant invention lacks novelty.

Claims 1-4, 6, 11, 30-34, 36, 37, 39, 43 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kriesche et al (US 5,565,545).

Kriesche et al teach polyester resins containing Sb and Ge table 1. Bottles are taught at col. 1, line 67, and said polyester resins inherently yield the instant Hunter haze value since Kriesche et al teach transparent packaging with a low haze value.

Thus, the instant invention lacks novelty.

Claims 1-4, 6, 11, 30-37, 39, 43 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tindale (US 5,419,936).

Tindale teaches polyester resins containing Sb in table 1 wherein low haze values are seen. Masterbatch method is taught at col. 3, lines 11-16. Thus, the instant invention lacks novelty.

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Claims 1-4, 6, 11, 30-34, 36, 37, 39, 43 and 44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pengilly (US 4,535,118).

Pengilly teaches polyester resins containing various metals at col. 6, lines 5-38. The instant low haze values are seen in table 1. Thus, the instant invention lacks novelty.

Claims 1-5, 7-9, 11-14, 16, 17, 19-24, 26, 29-34, 36-38, 40, 41, 43 and 44 are rejected under 35 U.S.C. 103(a) as obvious over Yamashita et al (US 6,218,017).

Yamashita et al teach a composition containing various inorganic particles at col. 7, line 56 to col. 12, line 48 wherein a polyester resin and 1 to 100 wt% of inorganic particles having a size of 0.001 to 200 microns are seen. Thus, choosing 1 wt% (10,000 ppm) of inorganic particles having a size of 25 to 200 microns would be a *prima facie* obviousness to one skilled in the art. See *In re Mills*, 477 F2d 649, 176 USPQ 196 (CCPA); Reference must be considered for all that it discloses and must not be limited to its preferred embodiments or working examples. Note that the instant claims are silent as to the amount of inorganic particles having a size greater than 25 microns. Thus, the recited density of 2.44 g/cc regarding inorganic particles having a size less than 25 microns has little probative value.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize 1 wt% (10,000 ppm) of inorganic particles having a size of 25 to 200 microns

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in a polyester resin of Yamashita et al since choosing a range within a range is a *prima facie* obviousness.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/October 8, 2002



TAE H. YOON
PATENT EXAMINER